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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/966,091      | 10/01/2001  | Massimo Grasso       | IR-1951 (2-2472)    | 4728             |

2352 7590 08/06/2003  
OSTROLENK FABER GERB & SOFFEN  
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NEW YORK, NY 100368403

EXAMINER

CUNNINGHAM, TERRY D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2816

DATE MAILED: 08/06/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/966,091

Applicant(s)

GRASSO ET AL.

Examiner

Terry D. Cunningham

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 27 January 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Summary of changes in this action***

1. The rejection under 35 U.S.C. § 112, first paragraph, has been overcome.
2. Although Examiner contends that the reference to Kimura et al. is still applicable, a new ground of rejection of further relevance is included herein.

### ***Request for Continued Examination***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 June 2003 has been entered.

### ***Drawings***

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 27 January 2003, has been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Applicant states that formal drawings have been submitted, however, no such drawings have been found.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, lines 4-6, it is not understood whether or not the “gating device” is part of the “control circuit”. If such is part of the “control circuit”, this should be stated. If not, the relevance thereof is not understood. In lines 5, it is not understood what relevance the “power device” has since such is “intended use” with respect to the “driving circuit” which is, in turn, “intended use” for the “control circuit”.

Claims 2-8, 18 and 23 are rejected for the reasons discussed above with claim 1.

Claims 9-17, 19-22 and 24-27 are rejected for similar reasons as discussed above with claims 1-8, 18 and 23.

In claim 17, it is not understood how the “high side driving circuit” and the “low side driving circuit” can both be part of the “control circuit” when there has been no connection or cooperation recited therebetween.

In claim 20, lines 2-4, a high side driving circuit” has already been recited in claim 17. Also, it is not understood how the “high side circuit” can control a “high side driving circuit” (as recited in claim 17) when it includes a “high side driving circuit”. Also, in lines 5-7, the language concerning the “low side driving circuit” is indefinite for similar reasons as discussed in lines 2-4.

It is not seen that Applicant has any specific remarks concerning the above recited to claim 20.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-27 are rejected under 35 U.S.C. §102(b) as being anticipated by newly cited art to Masui (USPN 5,852,538). Masui discloses, in Fig. 1, a circuit comprising: “a driving circuit (3,4)”; “a power device (6)”; “sensing circuitry (9)” having “a comparator (9)”; “a gating device (8)”; and “correction circuitry (remainder of circuit)”, all connected and operating similarly as recited by Applicant.

As seen, when spurious information is at node C, such will be removed by the remainder of the circuit.

With respect to claims 3 and 11, it is notoriously well known that a IGBT (such as 6) includes and FET and a bipolar transistor.

With respect to claims 23-27, the reference clearly discloses that such removes negative spikes.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC  
July 30, 2003

  
Terry D. Cunningham  
Primary Examiner  
Art Unit 2816